## Terrestrial Conservation Focus Areas in Greatest Need (Tier I)

### Bighorn Intermontane Basin (290,287 acres)

Figure 30. Bighorn Intermontane Basin Focus Area

The Bighorn Intermontain Basin area protrudes across Montana's border from Wyoming and sits in the rain shadow of the Beartooth Range. The area is home to a very diverse wildlife community and represents a limited geographic area at the end of its range that resembles communities more typical of the Great Basin and Colorado Plateau than Montana. Riparian areas are limited minor drainages, and it is the driest area in Montana, typically receiving only 6 inches of precipitation annually. Snow seldom lasts long due to the predominant and seemingly ever present southwest winds. Native vegetation is generally dominated by shrubs, primarily black sagebrush, Wyoming big sagebrush, and greasewood. Understory grasses are generally sparse, with invading annuals such as cheatgrass often dominating. This is the home of the prairie rattlesnake as well as the sagebrush and greater short-horned lizards. Greater sage-grouse are abundant as are gray partridges. This is the only habitat in Montana that supports the chukar partridge. However, given the desert nature of the habitat, mule deer and pronghorn antelope can exist only in low densities.

#### Landscape Characteristics

This subsection consists of dissected plains, hills, terraces, and fans that formed in shale, siltstone, and sandstone overlain by some alluvium and lacustrine sediment. Elevations range from 3,700 to 4,700 feet. Drainage density is moderate. Mean annual precipitation ranges from 5 to 12 inches. The soil temperature and moisture regimes are mesic and aridic ustic. Winters are very dry. The primary natural disturbance is drought. Another important natural disturbance regime is prairie dog complexes. Land use is predominantly livestock

grazing and irrigated cropland. The breakdown for land stewardship in the Bighorn Intermontane Basin area is as follows:

| | |
|---|---|
| U.S. Federal Agencies: | 163,275 acres, or 56.2% of total area, which include: |
| BLM: | 157,097 acres, or 54.1% of total area |
| USFS: | 3,707 acres, or 1.3% of total area |
| NPS: | 2,471 acres, or 0.8% of total area |
| State Agencies: | 14,517 acres, or 5% of total area |
| Tribal Lands: | 4,819 acres, or 1.7% of total area |
| Private: | 107,676 acres, or 37.1% of total area |

**Associated Habitats**

| Habitat | Habitat Tier | Percentage of Area |
|---|---|---|
| Agricultural Lands - Irrigated | III | 2.46 |
| Low/Moderate Cover Grasslands | I | 3.44 |
| Utah Juniper | III | 3.73 |
| Xeric Shrub Grassland Associations | I | 5.67 |
| Badlands | II | 17.19 |
| Very Low Cover Grasslands | I | 28.28 |
| Sagebrush | I | 33.78 |

Note: A total of 94.55% of the Bighorn Intermontane Basin area is represented; 5.45% is made up of a combination of other habitat types.

**Associated Species of Greatest Conservation Need (Tier I Species)**

There are a total of 174 terrestrial vertebrate species that are found within the Bighorn Intermontane Basin Focus Area. Tier I species are listed below. All associations can be found in Table 33.

**Amphibians:** Northern Leopard Frog

**Reptiles:** Western Hog-nosed Snake and Milksnake

**Birds:** Bald Eagle, Greater Sage-Grouse, Mountain Plover, Long-billed Curlew, and Burrowing Owl

**Mammals:** Spotted Bat, Pallid Bat, Black-tailed Prairie Dog, White-tailed Prairie Dog, Gray Wolf, and Black-footed Ferret

**Conservation Concerns & Strategies**

| Conservation Concerns | Conservation Strategies |
|---|---|
| Loss of habitat due to conversion agriculture | Policy-based approaches that encourage the conservation of natural communities, rather than support their conversion |
| | Support public and private conservation programs/activities that encourage and support private land use stewardship |
| Drainage of natural wetlands | Participate in government and private conservation partnerships to reduce the loss of wetland habitat and restore lost wetlands |
| Invasive or exotic plant species | Cooperative efforts to reduce the abundance of exotic plant species |
| Disruption of natural disturbance processes, especially fire | Work with other agencies, tribes and private organizations to restore the natural disturbance processes |
| Fragmentation of habitat due to fossil fuel exploration and development activities | Work with corporations, land owners and other agencies to reduce impacts of exploration |
| | Education and research on fossil fuel development and its impacts on natural landscape |

**References**

A Biological Conservation Assessment for the Utah-Wyoming Rocky Mountain Ecoregion: Report to the Nature Conservancy. 2001. R. Noss, G. Wuerthner, K. Vance-Borland, and C. Carroll. Conservation Science, Inc. 125 pp. + Executive Summary and Appendix D.

U.S. Fish and Wildlife Service. 2004. Conservation Focus Areas of the Great Divide: a vast region encompassing the Upper Missouri, Yellowstone and upper Columbia watersheds. Publisher: USFWS, Benton Lake Wildlife Refuge, Great Falls, MT. 77 pp.